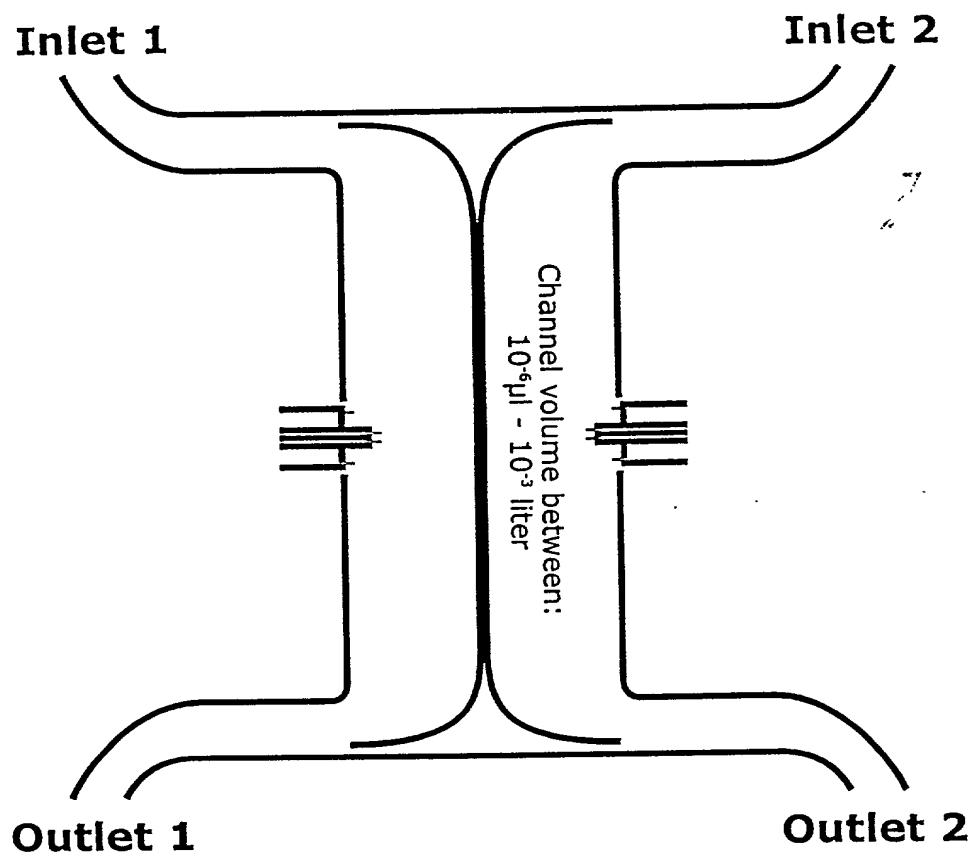
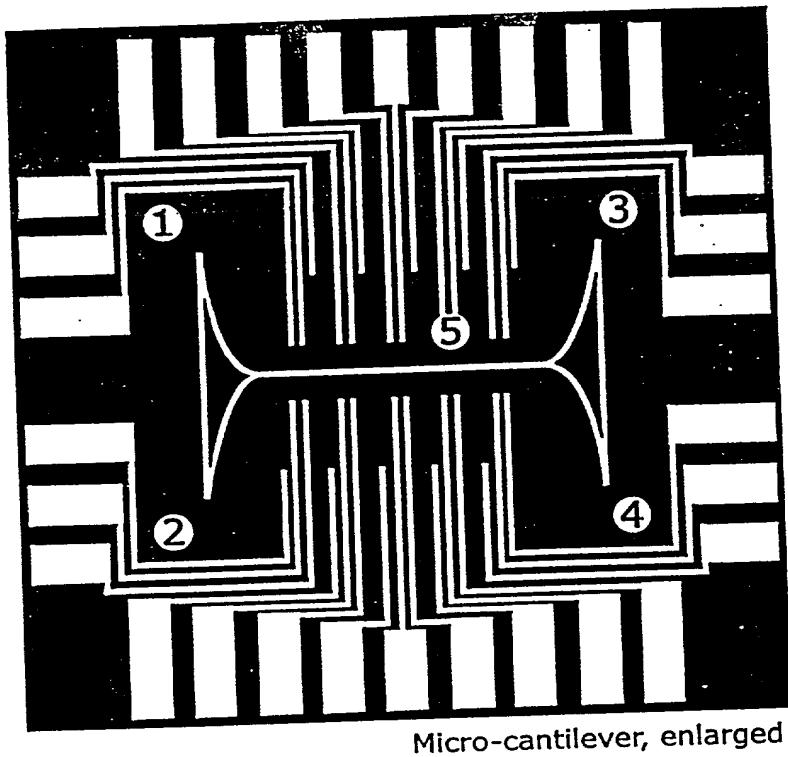


3.



Flow channel from above

A.



Channel volume between:
 $10^{-6}\mu\text{l} - 10^{-3}$ liter

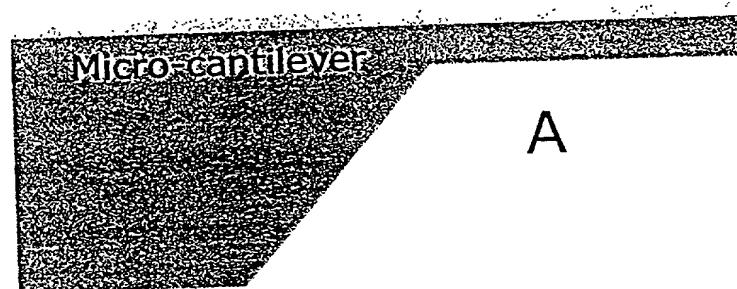
B.



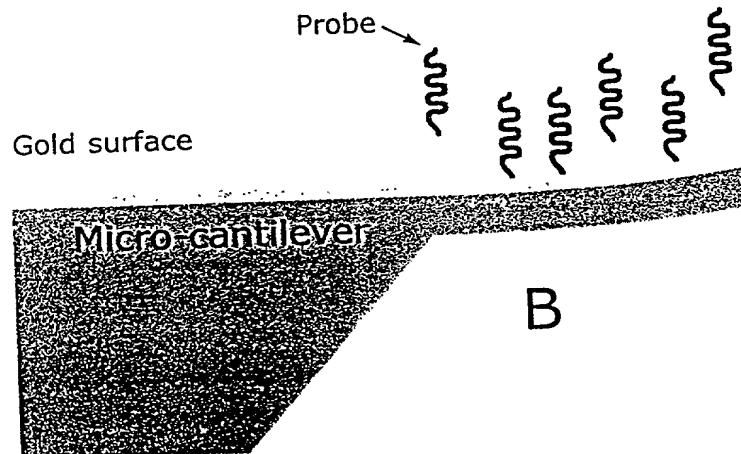
Micro-cantilever, actual size

5

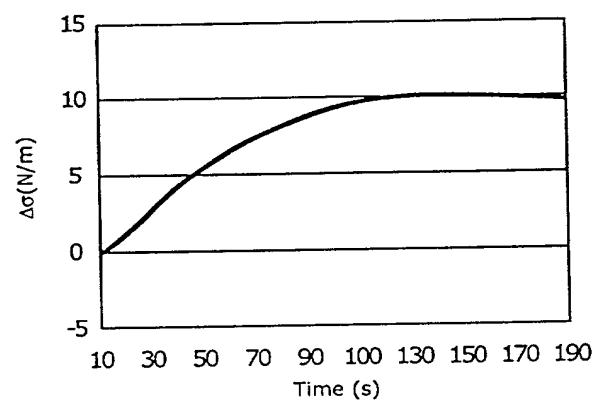
Gold surface



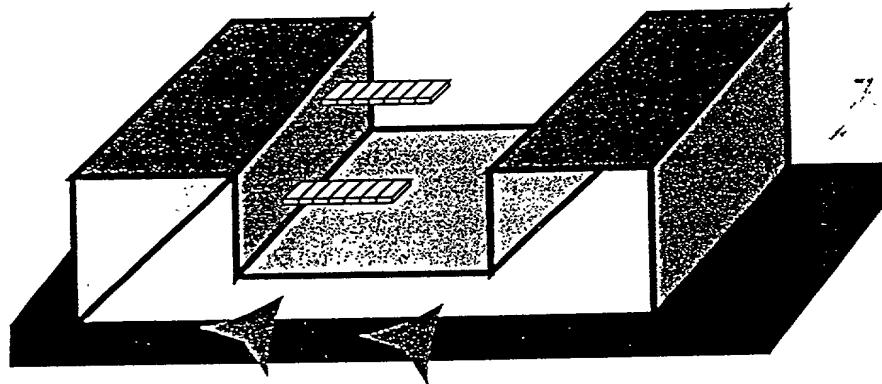
- The oscillating cantilever



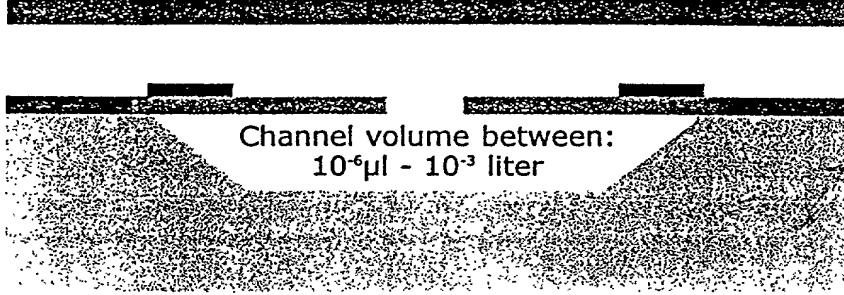
- The oscillating cantilever with attached probe



Channel volume between:
 $10^{-6}\mu\text{l}$ - 10^{-3} liter



Flow channel from side in 3D

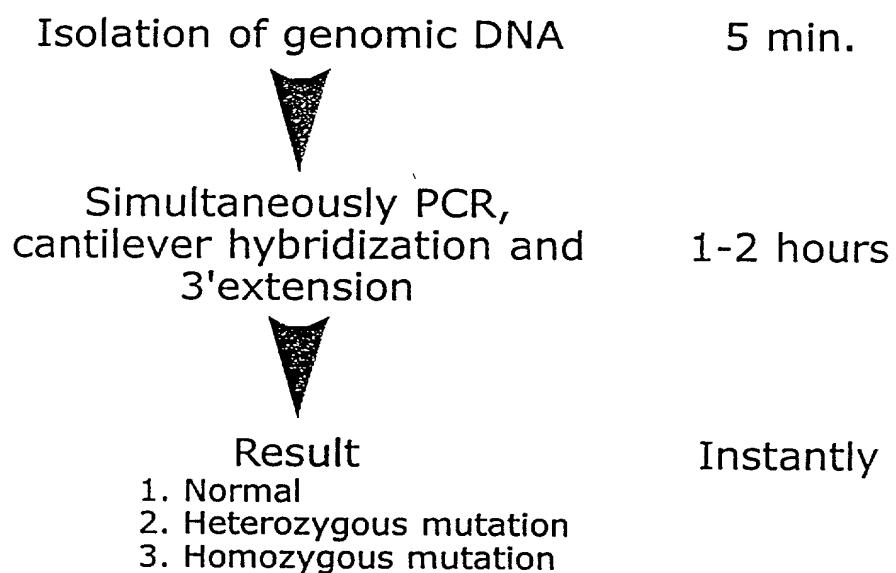


Channel volume between:
 $10^{-6} \mu\text{l} - 10^{-3} \text{ liter}$

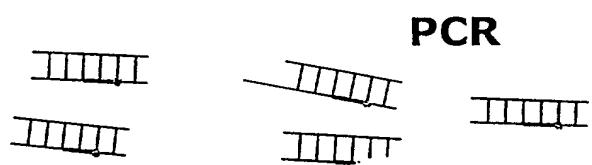
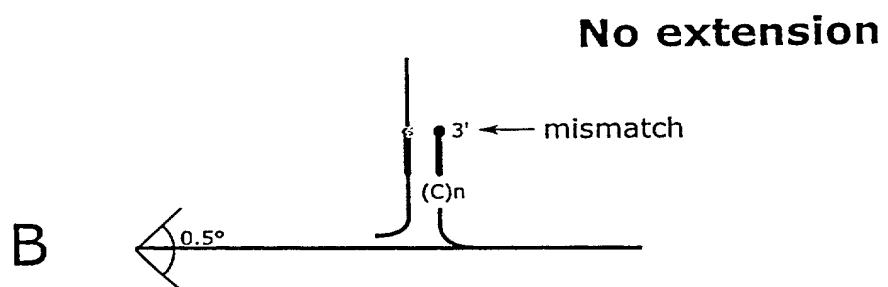
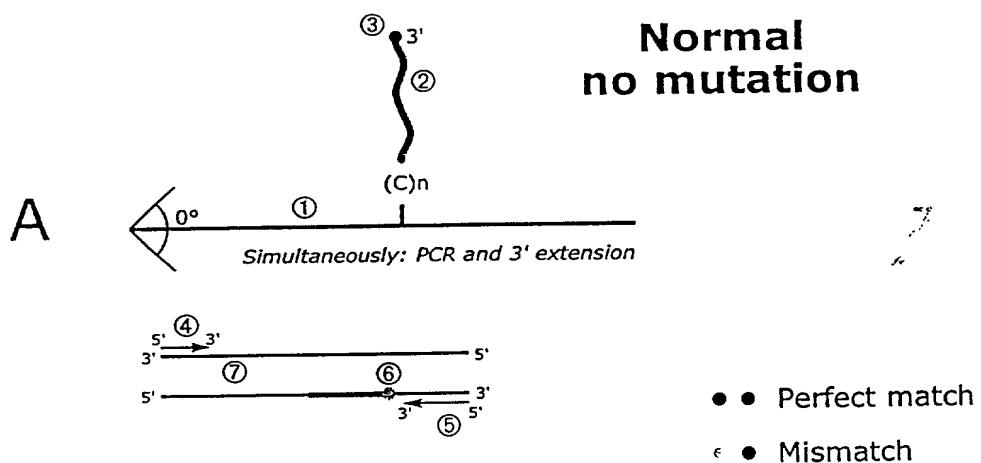
Flow channel cut-through

Flowchart for mutation detection

Time

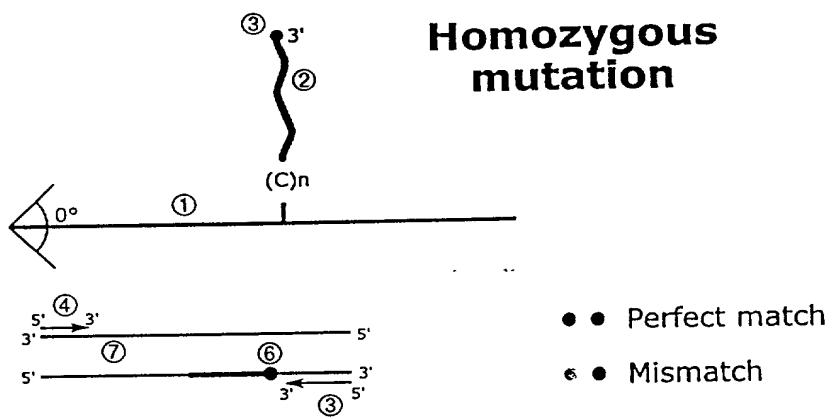


Start material: DNA



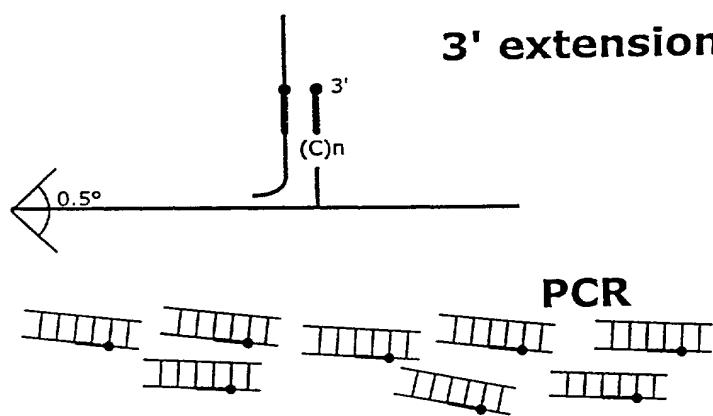
Homozygous mutation

A



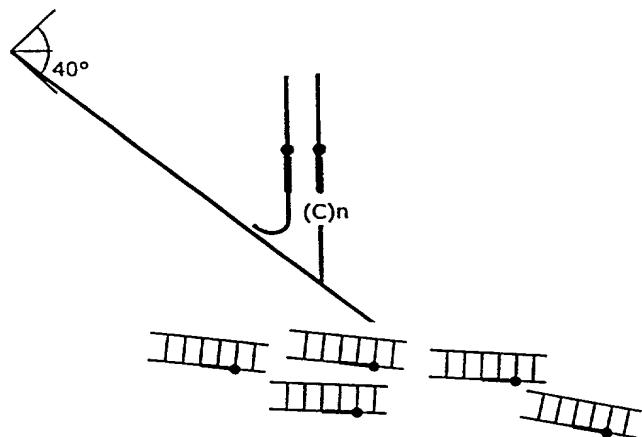
3' extension

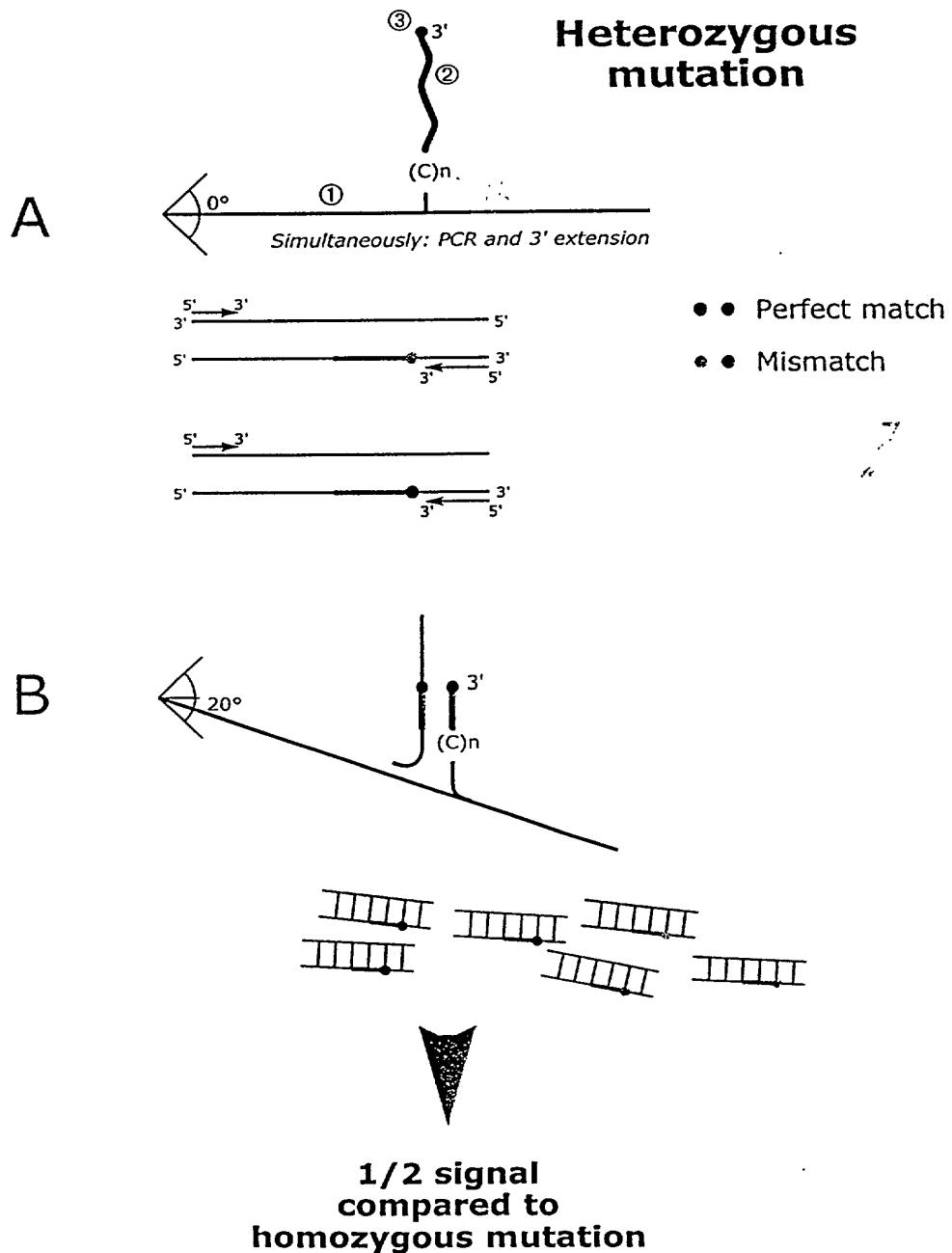
B



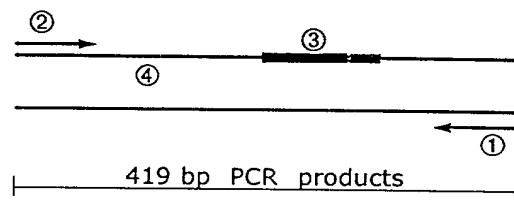
PCR

C





Detection of $\Delta 508$ mutation of the Cystic Fibrosis gene



**Flowchart
for specific detection
of RNA molecules**

Time

Isolation of RNA

30 min.



Simultaneously RT, PCR,
cantilever hybridization and
3'extension

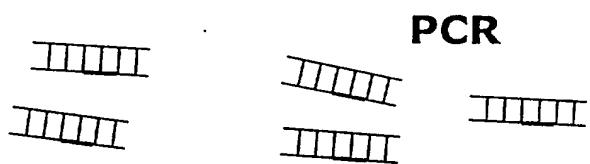
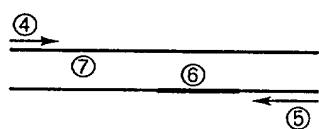
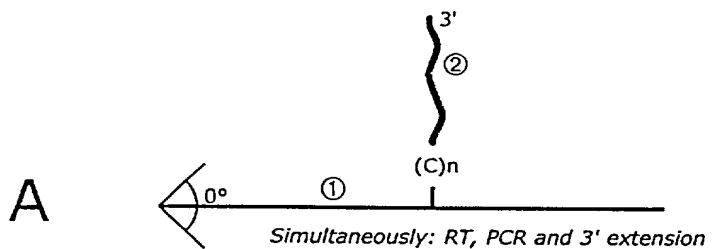
1-2 hours



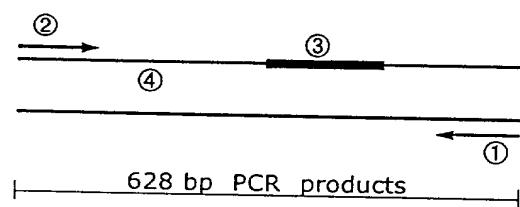
Result

Instantly

Start material: RNA



Detection of Interleukin 6 (IL6)



Detection of Glyceraldehyde-3-Phosphate- dehydrogenase (GAPD)

